

**Neotropical Monogenoidea. 21. *Trinigyrrus mourei* sp. n.
(Dactylogyridae) from the gills of the Amazonian catfish
Hypostomus marginatus (Loricariidae)**

by

Walter A. Boeger & Elizabeth Belmont-Jégu

Dr. Walter A. Boeger, Departamento de Zoologia, Universidade Federal do Paraná, Caixa postal 19020, 81530-970 Curitiba, PR, Brazil, and Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq).

M.Sc. Elizabeth Belmont-Jégu, Laboratório de Ictiopatologia, Instituto Nacional de Pesquisas da Amazônia, Caixa postal 478, 69011-970 Manaus/Am, Brazil.

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Abstract

Trinigyrrus mourei sp. n. (Dactylogyridae) is described from an Amazonian armoured catfish, *Hypostomus emarginatus* (Loricariidae) in Brazil. The new species closely resembles *T. hypostomatis* HANEK, MOLNAR & FERNANDO, 1974, from which it differs mainly by having: 1) a more robust copulatory organ; 2) a non-articulated accessory piece; and 3) comparatively longer haptor appendages.

Keywords: *Trinigyrrus mourei* sp. n., Dactylogyridae, Monogenoidea, *Hypostomus emarginatus*, Loricariidae.

Resumo

Trinigyrrus mourei sp. n. (Dactylogyridae) é descrito de um peixe cascudo amazônico, *Hypostomus emarginatus* (Loricariidae), no Brasil. A nova espécie assemelha-se com *T. hypostomatis* HANEK, MOLNAR e FERNANDO, 1974, da qual se difere principalmente por apresentar: 1) um órgão copulatório mais robusto; 2) uma peça acessória não articulada; e 3) apêndices haptorais comparativamente mais longos.

Introduction

Species of *Trinigyrrus* HANEK, MOLNAR & FERNANDO (1974) parasitize the gills of loricariid catfishes in the Neotropical region. These species are characterized mainly by having only a single ventral anchor/bar complex and hook-bearing haptoral appendages of variable length (see KRITSKY, BOEGER & THATCHER, 1986).

Only 3 species have been described in this genus: *T. hypostomatis* HANEK, MOLNAR & FERNANDO, 1974, from *Hypostomus robinii* (VALENCIENNES); *T. acuminatus* KRITSKY et al., 1986, from *Acanthicus hystrix* SPIX; and *T. tentaculoides* KRITSKY et al., 1986, from *Hypotopoma thoracathum* GÜNTHER. An emended diagnosis for *Trinigyrrus* and a discussion on its subfamilial assignment is presented by KRITSKY et al. (1986). In the present study, a new species of this genus is described.

Material and methods

Specimens of *Hypostomus emarginatus* VALENCIENNES, 1840 (Loricariidae) were caught from an unnamed creek in the Bairro of São Jorge, Manaus, Amazonas, Brazil. Methods of parasite collection, preparation, measurement, and numbering of haptoral hook pairs are those described by KRITSKY, THATCHER & BOEGER (1986). Illustrations were prepared with the aid of a camera lucida. Measurements are given in micrometers; the average is followed by the range and the number (n) of structures measured, in parentheses. Type specimens were deposited at the Harold W. Manter Lab., University of Nebraska (HWML), the United States National Museum, Beltsville, Maryland (USNM), and the Instituto Oswaldo Cruz (IOC).

Trinigyrrus mourei sp. n.

Type locality: Unnamed creek in the Bairro of São Jorge, Manaus, Amazonas, Brazil.

Type specimens: Holotype, IOC 33052a; Paratypes, IOC 33052b-d (3 specimens), HWML 36784 (2 specimens), USNM 82950 (3 specimens).

Description (based on 9 specimens): With characters of the genus as diagnosed by KRITSKY, BOEGER & THATCHER (1986). Body subcylindrical, 448 (390-500; n=5) long; greatest width 116 (67-152; n=6) immediately anterior to haptor. Cephalic region with 2 terminal lobes; head organs, cephalic glands inconspicuous. Pharynx subspherical, 27 (26-29; n=4) in diameter. Haptor 213 (182-236; n=4) wide, 96 (74-124; n=4) long; peduncle absent; haptoral appendages relatively long, ventral appendages bifurcated. Anchor 59 (55-65; n=6) long; with roots absent, subrectangular base, straight shaft, straight point with recurved tip; base 12 (11-15; n=6) wide; anchor filament double. Bar thin, elongate, flexible. Hooks 8-9 long, similar, with erect thumb, evenly curved shaft and point, shank proximally expanded; FH loop 1/2 shank length. Copulatory organ 36 (35-39; n=3) long, "J"-shaped, robust, with transversely truncate distal end, wide base; accessory piece walking-stick shaped. Gonads ovate, elongate. Testis 79 long, 47 wide; seminal vesicle a slight dilation of vas deferens; prostatic reservoirs fusiform, with thick walls. Germarium 77 long, 41 wide; uterus conspicuous; vagina an unsclerotized tube; seminal receptacle subovate, ventral to gonads. Vitellaria coextensive with intestinal ceca, vitelline commissure indistinct. Eggs not observed.

Remarks: The morphology of the copulatory organ and haptoral sclerites of the new species is similar to those of *T. hypostomatis* HANEK, MOLNAR & FERNANDO (1974). The two species can be easily differentiated by the structure of their copulatory complexes. The copulatory organ of *T. mourei* is a robust, "J"-shaped sclerotized tube, with a transversely truncate distal end while *T. hypostomatis* has a slender, "J"-shaped, distally tapering copulatory organ. The accessory piece is reported as being articulated in *T. hypostomatis* but it is clearly non-articulated in the new species.

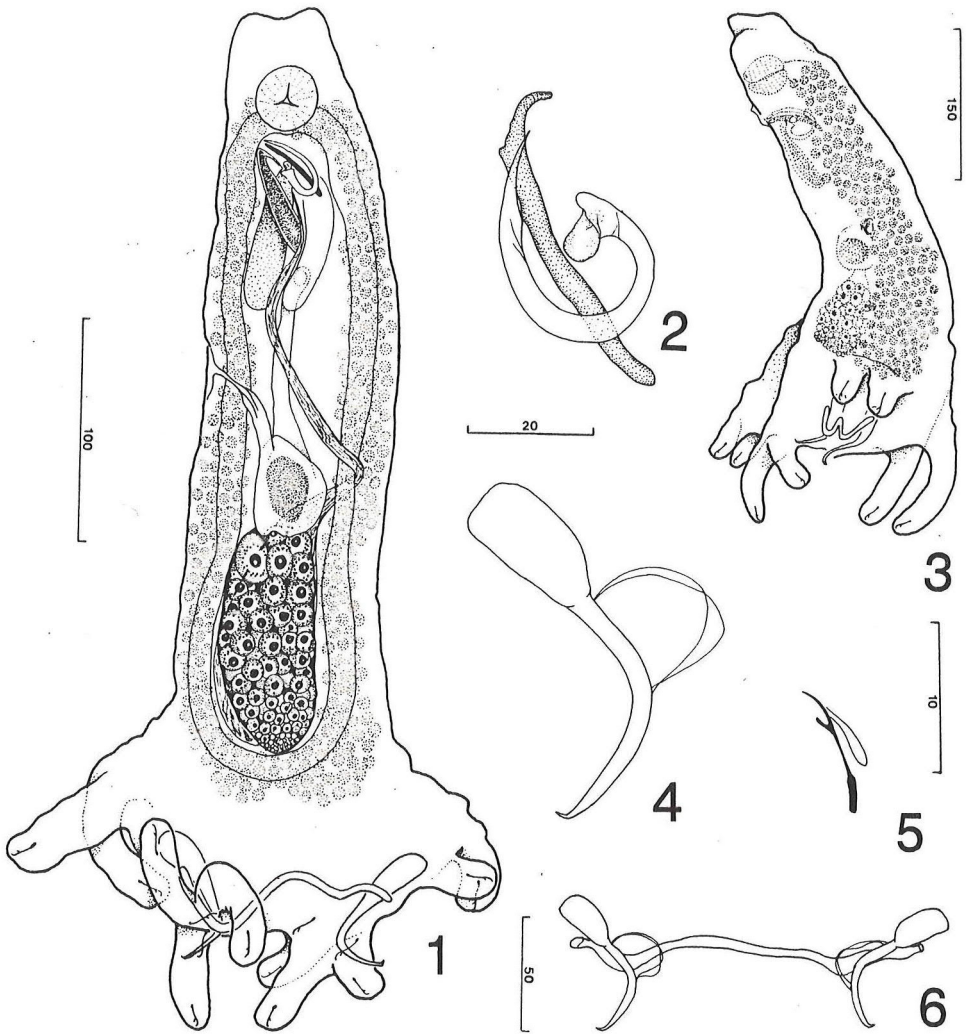
The new species is named for Father Jesus Santiago MOURE at the completion of his 80 years and for his impressive contributions to the research and teaching of zoology in Brazil.

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Figures 1-6:

Trinigyryus mourei sp. n.

1: Holotype, ventral view (100 µm scale). 2: Copulatory complex (20 µm scale). 3: Lateral view of a paratype (150 µm scale). 4: Anchor (20 µm scale). 5: Hook (10 µm scale). 6: Anchors/bar complex (ventral) (50 µm scale).